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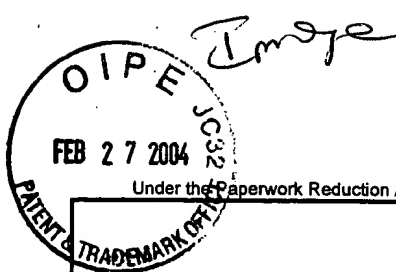


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PTO/SB/92 (08-03)

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Kristin Kaberry  
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Kristin Kaberry

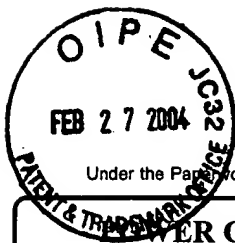
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I hereby appoint:



Practitioners associated with the Customer Number:

31904

OR



Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

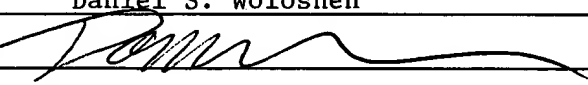
Assignee Name and Address:

GTC Biotherapeutics, Inc.  
175 Crossing Boulevard, Suite 410  
Framingham, MA 01702

**A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.**

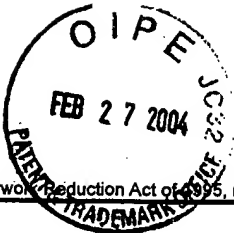
**SIGNATURE of Assignee of Record**

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Name	Daniel S. Woloshen			
Signature		Date	2/24/04	
Title	Sr. Vice President and General Counsel		Telephone	(508) 370-5243

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/~~Patent Owner~~ Michael Edge et al.

Application No./~~Patent No.~~ 09/398,610 Filed/~~Issue~~ Date: 09/17/1999

Entitled: Transgenically Produced Fusion Proteins

GTC Biotherapeutics, Inc., \* a corporation; ~~corporation; government agency~~  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is: \*AstraZeneca UK Limited; and the United States of America as  
represented by the Secretary of Health and Human Services.

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Michael D. Edge To: AstraZeneca UK Limited  
The document was recorded in the United States Patent and Trademark Office at  
Reel 013575, Frame 0931, or for which a copy thereof is attached.
2. From: Susanna M. Rybak To: United States of America as represented  
by the Secretary of Health and Human Services  
The document was recorded in the United States Patent and Trademark Office at  
Reel 012624, Frame 0047, or for which a copy thereof is attached.
3. From: Daniel Pollock, Yann Echelard, and Harry M. Meade  
Genzyme Transgenics Corporation  
The document was recorded in the United States Patent and Trademark Office at  
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☒ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

2/20/04  
Date  
(508) 370- 5150-  
Telephone number

Byron V. Olsen  
Typed or printed name  
Byron Olsen  
Signature

.Associate General Counsel, Intellectual  
Title Property

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Continuation of chain of title from the inventor(s) of Patent Application No. 09/398,610 to the current assignee as shown below:

4. From: Genzyme Transgenics Corporation To: GTC Biotherapeutics, Inc.  
The document was recorded in the United States Patent and Trademark Office at Reel 013782, Frame 0450, or for which a copy thereof is attached.



LSB

10275-137001

JANUARY 31, 2002

FISH & RICHARDSON P.C.  
LOUIS MYERS  
225 FRANKLIN STREET  
BOSTON, MASSACHUSETTS 02110-2804

Under Secretary of Commerce For Intellectual Property and  
Director of the United States Patent and Trademark Office  
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RECORDATION DATE: 01/17/2002

REEL/FRAME: 012349/0127  
NUMBER OF PAGES: 5

BRIEF: DOCUMENT RE-RECORDED TO CORRECT ERRORS CONTAINED IN PROPERTY NUMBER 09398620 DOCUMENT PREVIOUSLY RECORDED ON REEL 010847 FRAME 0196.

ASSIGNOR:  
POLLOCK, DAN

DOC DATE: 04/11/2001

ASSIGNOR:  
ECHELAND, YANN

DOC DATE: 04/06/2001

ASSIGNOR:  
MEADE, HARRY M.

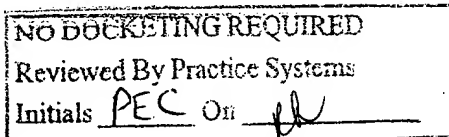
DOC DATE: **RECEIVED**

ASSIGNEE:  
GENZYME TRANSGENICS CORPORATION  
175 CROSSING BOULEVARD  
POST OFFICE BOX 9322  
FRAMINGHAM, MASSACHUSETTS  
01701-  
9322

FEB 07 2002  
FISH & RICHARDSON, PC.  
BOSTON OFFICE

SERIAL NUMBER: 09398610  
PATENT NUMBER:

FILING DATE: 09/17/1999  
ISSUE DATE:



SHARON LATIMER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

01-30-2002

REC



ET

101952985

Commissioner for Patents: Please record the attached original document(s) or copy(ies).

1. Name of conveying party(ies):

Dan Pollock, Yann Echelard and Harry M. Meade

Additional name(s) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Genzyme Transgenics Corporation  
175 Crossing Boulevard  
Post Office Box 9322  
Framingham, MA 01701-9322

Additional names/addresses attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☐ Assignment  
☐ Merger  
☐ Security Agreement  
☐ Change of Name  
☒ Other: Corrective of 010847/0196, Serial 09/398,620

Execution Date: 04/06/00; 04/11/00

4. Application number(s) or patent number(s):

If this document is being filed with a new application, the execution date of the application is:

A. Patent Application No(s):

09/398,610

B. Patent No(s):

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5. Name/address of party to whom correspondence concerning document should be mailed:

LOUIS MYERS  
Fish & Richardson P.C.  
225 Franklin Street  
Boston, Massachusetts 02110-2804

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR §3.41): \$40

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Laurie Butler Lawrence  
Reg. No. 46,593

Name of Person Signing

*Laurie Butler Lawrence*  
Signature

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2 SHEET

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Attorney Docket No.: 10275-137001

S-31-00

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1. Name of conveying party(ies): Dan Pollock, Yann Echelard and Harry M. Meade Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Genzyme Transgenics, Inc. Five Mountain Road Framingham, MA 01701-9322 Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 04/08/00 and 04/11/00	
4. Application number(s) or patent number(s): 09/398,620 If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
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Lauranne Butler Reg. No. P46,593 Name of Person Signing	<i>Lauranne Butler</i> Signature 5/26/00 Date
Total number of pages including coversheet, attachments and document: 4	

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*May 26, 2000* *Lauranne Butler* *Lauranne Butler*  
Date of Deposit Signature Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, we, Dan Pollock of Medway, MA; Yann Echelard of Jamaica Plain, MA; and Harry M. Meade of Newton, MA, hereby assign to Genzyme Transgenics, Inc., a Massachusetts corporation having a place of business at: Five Mountain Road, Framingham, MA 01701-9322, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled **TRANSGENICALLY PRODUCED FUSION PROTEINS**, filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at One Mountain Road, Framingham  
this 11 day of April, 2000  
Dan Pollock L.S.  
Dan Pollock

State of Massachusetts:  
: ss.

County of Middlesex :

Before me this 11 day of April, 2000, personally appeared  
Dan Pollock, known to me to be the person whose name is subscribed to the foregoing  
Assignment and acknowledged that he executed the same as his free act and deed for the  
purposes therein contained.

USA Marie Seavey  
Notary Public

My Commission Expires:

USA MARIE SEAVEY  
Notary Public  
Av Comm. Expires Dec. 13, 2002

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at 175 Crossing Blvd, Framingham Ma  
this 6 day of April, 2000  
Yann Echelard L.S.  
Yann Echelard

State of Massachusetts:  
: ss.

County of Middlesex :

Before me this 6 day of April, 2000, personally appeared  
Yann Echelard, known to me to be the person whose name is subscribed to the foregoing  
Assignment and acknowledged that he executed the same as his free act and deed for the  
purposes therein contained.

Lisa Marie Seavey  
Notary Public

My Commission Expires:

LISA MARIE SEAVEY  
Notary Public

My Comm. Expires Dec. 13, 2002

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at One Mountain Road Framingham  
this 11 day of April, 2000  
Harry M. Meade L.S.  
Harry M. Meade

State of Massachusetts :  
: ss.  
County of Dorchester :

Before me this 11 day of April, 2000, personally appeared  
Harry M. Meade, known to me to be the person whose name is subscribed to the foregoing  
Assignment and acknowledged that he executed the same as his free act and deed for the  
purposes therein contained.

Lisa Marie Seavey  
Notary Public

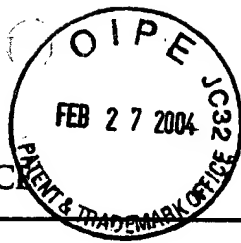
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RECORDATION DATE: 02/12/2002

REEL/FRAME: 012624/0047  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RYBAK, SUSANNA M.

DOC DATE: 04/06/2000

ASSIGNEE:

UNITED STATES OF AMERICA, AS  
REPRESENTED BY THE SECRETARY OF  
HEALTH AND HUMAN SERVICES  
OFFICE OF TECHNOLOGY TRANSFER  
6011 EXECUTIVE BLVD., SUITE 325  
ROCKVILLE, MARYLAND 20852-3804

SERIAL NUMBER: 09398610  
PATENT NUMBER:

FILING DATE: 09/17/1999  
ISSUE DATE:

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SAUNDRA BALLENGER, EXAMINER  
ASSIGNMENT DIVISION  
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03-06-2002

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Attorney Docket No.: 10275-137001MRD  
2-12-02

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3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 04/06/2000	4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Name/address of party to whom correspondence concerning document should be mailed: LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>	
Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing	<i>Laurie Lawrence</i> Signature 1/17/02 Date
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Date of Deposit*Terri L. Knox*  
Signature*Terri L. Knox*  
Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, I, Susanna M. Rybak, of, Frederick, MD, hereby assign to the government of the United States of America as represented by the Secretary of the Department of Health and Human Services, (hereinafter, THE GOVERNMENT) and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me this day, entitled TRANSGENICALLY PRODUCED FUSION PROTEINS filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and I authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for me and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at NCI/FCRDC,  
this 6 day of April, 2000  
Susanna M. Rybak L.S.

State of Maryland :  
: ss.  
County of Frederick :

Before me this 6 day of April, 2000, personally appeared  
Susanna M. Rybak, known to me to be the person whose name is subscribed to the foregoing  
Assignment and acknowledged that she executed the same as her free act and deed for the  
purposes therein contained.

Ann E. Rogers  
Notary Public  
My Commission Expires: 04/01/01

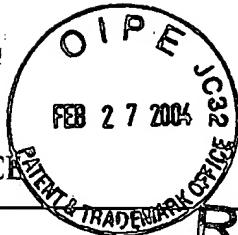
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APRIL 17, 2003

FISH & RICHARDSON P.C.  
LOUIS MYERS  
2255 FRANKLIN STREET  
BOSTON, MA 02110-2804

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Washington, DC 20231  
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NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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RECORDATION DATE: 12/11/2002

REEL/FRAME: 013575/0931  
NUMBER OF PAGES: 4

BRIEF: CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF THE ASSIGNEE FILED ON 02/12/02. RECORDED ON REEL 012624 FRAME 0041. ASSIGNOR HEREBY CONFIRMS THE ENTIRE INTEREST.

ASSIGNOR:

EDGE, MICHAEL D.

DOC DATE: 07/24/2002

ASSIGNEE:

ASTRAZENECA UK LIMITED  
15 STANHOPE GATE  
LONDON W1Y 6LN, UNITED KINGDOM

SERIAL NUMBER: 09396610  
PATENT NUMBER:

FILING DATE: 09/15/1999  
ISSUE DATE:

DOROTHY RILEY, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

12-18-2002

Substitute Form PTO-1595  
 Attorney Docket No.: 10275-137001  
 Client's Ref. No.: GTC-42



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SHEET

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Commissioner for Patents: Please record the attached original document(s) or copy(ies).				
1. Name of conveying party(ies): Michael D. Edge <b>12-11-02</b> Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): AstraZeneca UK Limited 15 Stanhope Gate London W1Y 6LN United Kingdom  Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
3. Nature of conveyance: <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input checked="" type="checkbox"/> Other: Request to Correct Notice of Recordation of Assignment Document Execution Date: 7/24/02	OFFICE OF PUBLIC RECORDS 20 DEC 11 AM 8:17 FINANCE SECTION			
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
5. Name/address of party to whom correspondence concerning document should be mailed:  LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.			
DO NOT USE THIS SPACE				
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>  <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">           Laurie Butler Lawrence            Reg. No. 46,593            Name of Person Signing         </td> <td style="width: 30%; text-align: center;">             Signature         </td> <td style="width: 30%; text-align: center;"> <b>12/06/02</b>            Date         </td> </tr> </table>		Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing	 Signature	<b>12/06/02</b> Date
Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing	 Signature	<b>12/06/02</b> Date		
Total number of pages including coversheet, attachments and document: 3				

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12/17/2002 DBYRNE 00000208 09398610

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## CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

**12/6/02**  
 Date of Deposit

**Cassandra Beepot**  
 Signature

**Cassandra Beepot**  
 Typed Name of Person Signing Certificate

03-06-2002

Substitute Form PTO-1595  
Attorney Docket No.: 10275-137001

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2-12-02MAR  
2-12-02RECEIVED  
FEB 12 2002

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Michael D. Edge Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): AstraZeneca Limited 15 Stanhope Gate London W1Y 6LN United Kingdom Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 03/16/2000	
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR \$3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>  Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing  Signature: <i>Laurie Lawrence</i> Date: <i>1/17/02</i>	
Total number of pages including coversheet, attachments and document: 3	

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03/05/2002 6TDH11 00000210 09398610

01 FC:581

40.00 09

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1/17/02  
Date of Deposit

*Terri L. Knox*  
Signature

Terri L. Knox  
Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, I, Michael D. Edge, of Macclesfield, Cheshire, United Kingdom, hereby assign to AstraZeneca UK Limited, a Great Britain corporation having a place of business at 15 Stanhope Gate, London W1Y 6LN, United Kingdom, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me this day, entitled TRANSGENICALLY PRODUCED FUSION PROTEINS, filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and I authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for me and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at CHESTER, U.K.,  
this 24th day of JULY, 2002  
Michael D. Edge L.S.  
Michael D. Edge

State of UNITED KINGDOM :  
: ss.  
County of CHESTER :

Before me this 24th day of July, 2002, personally appeared  
Michael D. Edge, known to me to be the person whose name is subscribed to the foregoing  
Assignment and acknowledged that he executed the same as his free act and deed for the  
purposes therein contained.

Robin Galbraith Moore

Notary Public

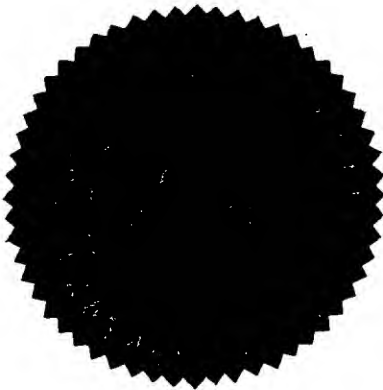
My Commission Expires: at death

**ROBIN GALBRAITH MOORE**

**NOTARY PUBLIC**

**Grosvenor Court, Chester**

**CH1 1HG**





**CORRECTED  
NOTICE**

AUGUST 11, 2003

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Under Secretary of Commerce For Intellectual Property and  
Director of the United States Patent and Trademark Office  
Washington, DC 20231  
[www.uspto.gov](http://www.uspto.gov)

GTC BIOTHEAPEAUTICS INC.  
BYRON V. OLSEN  
175 CROSSING BLVD., SUITE 410  
FARMINGHAM, MA 01702

UNITED STATES PATENT AND TRADEMARK OFFICE  
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RECORDATION DATE: 06/27/2003

REEL/FRAME: 013782/0450  
NUMBER OF PAGES: 5

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GENZYME TRANSGENICS CORPORATION

DOC DATE: 05/22/2002

ASSIGNEE:

GTC BIOTHERAPEUTICS, INC.

175 CROSSING BLVD., SUITE 410

✓ FRAMINGHAM, MASSACHUSETTS 01702

SERIAL NUMBER: 60400344

PATENT NUMBER:

FILING DATE: 08/01/2002

ISSUE DATE:

SERIAL NUMBER: 60411419

PATENT NUMBER:

FILING DATE: 09/17/2002

ISSUE DATE:

SERIAL NUMBER: 60449786

PATENT NUMBER:

FILING DATE: 02/24/2003

ISSUE DATE:

SERIAL NUMBER: 09012904

PATENT NUMBER:

FILING DATE: 01/23/1998

ISSUE DATE:

013782/0450 PAGE 2

SERIAL NUMBER: 09175683  
PATENT NUMBER:

FILING DATE: 10/20/1998  
ISSUE DATE:

SERIAL NUMBER: 09175684 ✓  
PATENT NUMBER: 6593463 ✓

FILING DATE: 10/20/1998  
ISSUE DATE: 07/15/2003

SERIAL NUMBER: 09298508  
PATENT NUMBER:

FILING DATE: 04/22/1999  
ISSUE DATE:

SERIAL NUMBER: 09398610  
PATENT NUMBER:

FILING DATE: 09/17/1999  
ISSUE DATE:

SERIAL NUMBER: 09399079  
PATENT NUMBER:

FILING DATE: 09/17/1999  
ISSUE DATE:

SERIAL NUMBER: 09431842  
PATENT NUMBER:

FILING DATE: 11/02/1999  
ISSUE DATE:

SERIAL NUMBER: 09550001  
PATENT NUMBER:

FILING DATE: 04/14/2000  
ISSUE DATE:

SERIAL NUMBER: 09571116  
PATENT NUMBER:

FILING DATE: 05/12/2000  
ISSUE DATE:

SERIAL NUMBER: 09671493  
PATENT NUMBER:

FILING DATE: 09/27/2000  
ISSUE DATE:

SERIAL NUMBER: 09688254  
PATENT NUMBER:

FILING DATE: 10/13/2000  
ISSUE DATE:

SERIAL NUMBER: 09849657  
PATENT NUMBER:

FILING DATE: 05/04/2001  
ISSUE DATE:

SERIAL NUMBER: 09884586  
PATENT NUMBER:

FILING DATE: 06/19/2001  
ISSUE DATE:

SERIAL NUMBER: 09913697  
PATENT NUMBER:

FILING DATE: 01/28/2002  
ISSUE DATE:

SERIAL NUMBER: 09927824  
PATENT NUMBER:

FILING DATE: 08/10/2001  
ISSUE DATE:

SERIAL NUMBER: 10081400  
PATENT NUMBER:

FILING DATE: 02/20/2002  
ISSUE DATE:

SERIAL NUMBER: 10082018  
PATENT NUMBER:

FILING DATE: 02/20/2002  
ISSUE DATE:

SERIAL NUMBER: 10137618  
PATENT NUMBER:

FILING DATE: 05/02/2002  
ISSUE DATE:

SERIAL NUMBER: 10172159  
PATENT NUMBER:

FILING DATE: 06/13/2002  
ISSUE DATE:

SERIAL NUMBER: 10188658  
PATENT NUMBER:

FILING DATE: 07/02/2002  
ISSUE DATE:

SERIAL NUMBER: 10338546  
PATENT NUMBER:

FILING DATE: 01/08/2003  
ISSUE DATE:

SERIAL NUMBER: 10358037  
PATENT NUMBER:

FILING DATE: 02/04/2003  
ISSUE DATE:

SERIAL NUMBER: 10423792  
PATENT NUMBER:

FILING DATE: 04/25/2003  
ISSUE DATE:

• SERIAL NUMBER: 08282256  
PATENT NUMBER: 5576040✓

FILING DATE: 07/29/1994  
ISSUE DATE: 11/19/1996

• SERIAL NUMBER: 08170579✓  
PATENT NUMBER: 5827690✓

FILING DATE: 12/20/1993  
ISSUE DATE: 10/27/1998

SERIAL NUMBER: 08391743✓  
PATENT NUMBER: 5843705✓

FILING DATE: 02/21/1995  
ISSUE DATE: 12/01/1998

SERIAL NUMBER: 08410887✓  
PATENT NUMBER: 5849992✓

FILING DATE: 03/27/1995  
ISSUE DATE: 12/15/1998

SERIAL NUMBER: 08648235✓  
PATENT NUMBER: 6268487✓

FILING DATE: 05/13/1996  
ISSUE DATE: 07/31/2001

SERIAL NUMBER: 09143155✓  
PATENT NUMBER: 6441145✓

FILING DATE: 08/28/1998  
ISSUE DATE: 08/27/2002

SERIAL NUMBER: 09028551✓  
PATENT NUMBER: 6528699✓

FILING DATE: 02/24/1998  
ISSUE DATE: 03/04/2003

SERIAL NUMBER: 09490657✓  
PATENT NUMBER: 6545198✓

FILING DATE: 01/24/2000  
ISSUE DATE: 04/08/2003

SERIAL NUMBER: 09333213✓  
PATENT NUMBER: 6548653✓

FILING DATE: 06/15/1999  
ISSUE DATE: 04/15/2003

SERIAL NUMBER: 09298971✓  
PATENT NUMBER: 6580017✓

FILING DATE: 04/23/1999  
ISSUE DATE: 06/17/2003

✓ SERIAL NUMBER: 09094781✓  
PATENT NUMBER: 6210736✓

FILING DATE: 06/15/1998  
ISSUE DATE: 04/03/2001

MAURICE CARTER, PARALEGAL  
ASSIGNMENT DIVISION  
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